

Notice of Allowability

Application No.

10/713,904

Examiner

Kenneth Tang

Applicant(s)

TSAO, SHENG TED TAI

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment on 9/26/07.
2. ☒ The allowed claim(s) is/are 41-54; now renumbered as 1-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/26/07.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sheng (Ted) Tai Tsao on 11/26/07.

The application has been amended as follows:

Claims 1-40 are cancelled.

Add new claims 41-54 as shown below:

41. (New) A computer system for supporting multiple simultaneous concurrent tasks within a single web browser in a central controlled distributed scalable virtual machine (CCDSVM) environment over a network, said computer system comprising:

one or more Console Hosts, from which a user for each of said one or more Console Hosts is able to perform system tasks through a web browser;

one or more System Units, each configured with service modules;

a Control Management Station comprising a web browser, web server software, and console supporting software, wherein said console supporting software comprises of web server interface software modules and control management software modules;

wherein said service modules of said one or more System Units are coupled with said console support software of said Control Management Station and said one or more Console Hosts over the network to support running multiple simultaneous concurrent tasks within a single web browser by the following:

wherein each user logs into said CCDSVM environment from the web browser of said one or more Console Hosts on the network, such that each user can obtain information of said one or more System Units and said Control Management Station, wherein each user selects one of said System Units or Control Management Station as a Target System, initiates and submits tasks to the selected Target System based on each user's authentication of certain privileges, which can run concurrently within said each user's single web-browser in said CCDSVM environment, based on said obtained information of said one or more System Units and said Control Management Station in addition to said user authentication of certain privileges;

wherein said console supporting software on said Control Management Station receives and stores said submitted tasks into a user space task list and obtains associated locks for each of the tasks; and

wherein said console supporting software on said Control Management Station distributes said tasks to be executed on said Target System until all of said tasks are performed and releasing said locks along with the task execution.

42. (New) A method for supporting multiple simultaneous concurrent tasks within a single web browser in a central controlled distributed scalable virtual machine (CCDSVM) environment over a network, said method comprising:

providing one or more users to perform user space tasks through a web browser on one or more Console Hosts;

configuring one or more System Units with service modules, wherein said service modules of said one or more System Units are coupled with console software of a Control Management Station and said one or more Console Hosts over the network to support running multiple simultaneous concurrent tasks within a single web browser by the following:

logging in by each user into said CCDSVM environment from the web browser of said one or more Console Hosts on the network, such that each user can obtain information of said one or more System Units and said Control Management Station, wherein each user selects one of said a System Units or Control Management Station as a Target System, initiates and submits tasks to the selected Target System based on a user authentication of certain privileges;

wherein said tasks can run concurrently within said single web-browser in said CCDSVM environment, based on said obtained information of said one or more System Units and said Control Management Station in addition to said user authentication of certain privileges;

wherein said console support software on said Control Management Station receives and stores said submitted tasks into the user space task list and obtains associated locks for each of the tasks; and

wherein said console supporting software on said Control Management Station allocates said tasks to be executed on said Target System until all of said tasks are performed and said associated locks along with the task execution are released.

43. (New) The method of claim 42, further includes:

said software modules of said Control Management Station providing a login web page to said user;

said software modules of Control Management Station providing said user a mechanism to input password and account information on said login web page;

said web-browser of said one or more Console Hosts transmitting the authentication information to said console support software of said Control Management Station;

44. (New) The method of claim 42, further includes:

said software modules of said Control Management Station performing authentication and validation checking after receiving said authentication information, wherein said authentication validation checking further includes determining whether a user is allowed to login.

45. (New) The method of claim 42, further includes:

said software modules of said Control Management Station allows a plurality of users, each from the web browser of said one or more Console Hosts on the network, to concurrently login to said CCDSVM environment.

46. (New) The method of claim 42, further includes:

said obtained information of each System Unit and Control Management Station are related to and are used by said user to initiate tasks; and

said obtained information comprises of resource and configuration information of said system units and control station.

47. (New) The method of claim 42, further includes:

said software modules of said Control Management Station allowing said user to initiate one or multiple simultaneous concurrent tasks from a single web-browser of a Console Host for a Target System or for several different Target Systems based on said obtained information;

task information is transmitted from said web-browser of said Console Host to said software modules of said Control Management Station;

wherein said tasks could be any of the following:

moving or transmitting data such as a multiple Gig-bytes data file to and from any location within the CCDSVM network environment;

configuring entire resources in the CCDSVM environment;

configuring, partitioning, and assigning the entire storage system within the CCDSVM environment;

setting up authentication of a specific user from a specific web browser with certain privileges for said Target System, or a plurality of Target Systems;

setting up authentication for a client to obtain services of the CCDSVM environment;

monitoring and displaying network, storage, CPU, processes and thread activities and status for the CCDSVM environment; and

creating and mounting a file system, file and directory structures, and performing all related data file operations on either Control Management Station or System Units; and

performing tasks that are compatible to tasks in a regular native computer user work environment.

48. (New) The method of claims 42, further includes:

allowing multiple users on different Console Hosts to each login to the CCDSVM environment through a web browser such that multiple simultaneous concurrent tasks for a Target System or for a plurality of Target Systems can be initiated.

49. (New) The method of claim 42, further includes:

software modules of said Control Management Station receives task information from said web browser of said one or more Console Hosts;

software modules of said Control Management Station stores information of each task one at a time into a valid slot of said user space task list;

software modules of said Control Management Station acquires associated locks to protect resources used by each task and further to prevent each task from interfering or blocking each other.

50. (New) The method of claim 42, including:

wherein said locks acquired for each task are conventional or non-conventional locks;
wherein said conventional lock can be acquired and released by the same thread; and
wherein said non-conventional lock can be acquired by one thread and released by another thread.

51. (New) The method of claim 42, further includes:

if the Target System for a task is a System Unit, then said software modules of said Control Management Station transmits the task information to said service software modules of said Target System and said service software modules of said Target System performs the task;
and

if the Target System for a task is the Control Management Station, then said software modules of said Control Management Station performs the task.

52. (New) The method of claim 51, further includes:

creating threads of the software modules of the Control Management Station to perform the task on the Control Management Station

creating threads of said service modules of the System Unit to perform the task on the System Unit.

53. (New) The method of claim 42, further includes:

said software modules of control station determines whether said user is permitted to run a specific task, and to determine whether said user is permitted to run a task on a specific system.

54. (New) The method of claim 42, further includes:

wherein said associated locks are released one at a time along with each task's executing up to a point where the task is completed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Kt
11/21/07


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